NSIDC DAAC Time Line for Daily Operations

(Draft prepared by EGS I&T)

Strawman version dated February 27, 1998

Objective: Generate a realistic time line of activities for the operations readiness tests and EGS I&T certification tests at the NSIDC DAAC.

This first draft is an attempt to identify the daily activities needed at the NSIDC DAAC to support the AM1 science data processing. This should serve as an input to the DAAC and EGS I&T teams in planning the DAAC operations readiness tests and EGS certification tests. The reference documents used in the preparation of the timeline are:

- a. MODIS SDPS Version 1 System description (Document Number SDST-065, Change Notice 2, dated July 30, 1997).
- MODIS SDP S/W Requirements Specification V2 and Beyond (Document Number SDST-089, dated December 12, 1996).

NOTES:

- 1. Column 2 (Task/Activity) is based on the information in the first document referenced.
- 2. Column 3 (Comments/Explanations) is based on the information in both of the documents referenced.
- 3. There are 24 columns shown for the 24 hours in a day. The 25th column shows 0 to 1 hour of the next day just to accommodate the activities to occur after all the other activities for the day are complete.
- 4. Column 4 is used to identify the applicable EGS I&T tests as well as the DAAC operations procedures relevant to the task/activity.
- 5. Ancillary data ingest is shown to be occurring throughout the day simply because it can happen any time of the day. It does not mean that is a 24 hour activity. Later versions of this timeline will show a better scheduling of the ancillary data ingest activity.
- 6. The L2 data ingest as well as L3 and higher level processing activities include archiving also.
- 7. The L3 processing can begin immediately after the reception of L2 data from GDAAC and after receiving necessary ancillary data, if any.
- 8. The transfer of L2G products from GDAAC is likely to occur at the end of the day or at the beginning of the day because they have to be done after all the data for the day has been processed at GDAAC.
- 9. There is one activity designated as M&O. This can include all activities like doing back ups, providing services to users and so on.
- 10. Activities like generation of daily/weekly plans, generation of resource and production plans are shown to occur during the regular shift.
- 11. Report generation is shown to occur at the beginning of the day assuming that the reports will cover what happened during the preceding 24 hours.
- 12. The table is generated using the Microsoft Word and later can be implemented as a timeline chart using the Microsoft Project or some other application.

This draft is intended to be used for discussions between the NSIDCC DAAC and EGS I&T teams. No inputs from the DAAC team has been incorporated in this draft.

| # | Task / Activity / Operation | Comments / Explanations | Relevant Tests / | $\begin{smallmatrix} 0 & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 2 & 2$ |
|----|---|--|---------------------|---|
| Г | | | Ops Procs. | |
| 1 | System Startup/Restart | Only if needed | | |
| 2 | L2G Ingest and Archiving | MOD10, MOD10G, MOD29, MOD29G | EGS10, EGS11 | |
| 3 | Ingest Ancillary data and archive | Any time of the day | EGS10, EGS11 | |
| 4 | L3 Daily Gridded Snow Cover(PGE43) | Once/day. i/p: MOD10, o/p: MOD10A | EGS10, EGS11 | |
| 5 | L3 Gridded Sea Ice Daily (PGE44) | Once /day. i/p:MOD29, o/p: MOD29A | EGS10, EGS11 | |
| 6 | L2 Snow 10 day (PGE45) | Once in 10 days (?) i/p: MOD10A, o/p: MOD33C | EGS10, EGS11 | |
| 7 | L3 Sea Ice 10 day (PGE47) | Once for 10 days' data | EGS10, EGS11 | |
| | | i/p: MOD29A, o/p: MOD42 | | |
| 8 | L3 Gridded 10 day Snow Cover CMG (PGE ??) | Once in 10 days o/p: MOD33C1 | EGS10, EGS11 | |
| 9 | L3 Gridded Monthly snow Cover (PGE??) | Once in a month o/p: MOD33C2 | EGS10, EGS11 | |
| 10 | L3 Gridded 10 day sea ice CMG | Once in 10 days? | EGS10, EGS11 | |
| | (PGE??) | o/p: MOD42C1 | | |

| # | Task / Activity / Operation | Comments / Explanations | Relevant Tests / | 0 1 2 3 4 5 6 7 8 9 1 1 1 1 1 1 1 1 1 1 2 2 2 2 0 0 1 2 3 4 5 6 7 8 9 0 1 2 3 |
|----|---|--------------------------------------|---------------------|---|
| 11 | L3 Gridded Monthly Sea Ice (PGE??) | Once in a month? O/p MOD42C2 | EGS10, EGS11 | |
| 12 | M & O activities | Backup and other operations | EGS10, EGS11 | |
| 13 | Generation of daily Ops plans | Could be weekly | EGS10, EGS11 | |
| 14 | Resource / Production Planning | Could be weekly | EGS10, EGS11 | |
| 15 | Report Generation, etc | | EGS10, EGS11 | |
| 16 | Verification of inventory updates | This is one of the test objectives | | |
| 17 | User access of products and data distribution | Any time of the day using B0SOT/JEST | | |
| 18 | Power failure recovery | This is for test purposes | | |
| 19 | Transmit 10% of L2, L3 data to SCF for QA | | EGS10, EGS11 | SOME TIME IN THIS PERIOD |
| 20 | Update QA metadata | | EGS10, EGS11 | ANY TIME IN THIS PERIOD |
| 21 | ESDT addition/modification as needed | | EGS10, EGS11 | ANY TIME IN THIS PERIOD |
| 22 | Divert processing of bad data to private ESDT | | EGS10, EGS11 | ANY TIME IN THIS PERIOD |
| 23 | Algorithm activation after SSI&T | | EGS10, EGS11 | ANY TIME IN THIS PERIOD |
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| # | Task / Activity / Operation | Comments / Explanations | Relevant | 0 1 2 3 | 4 5 | 6 7 | 7 8 | _ | | _ | | _ | | _ | | | |
|----|---|-------------------------|-----------------|---------|-----|-----|-----|---|---|---|-----|---|-----|---|-----|----|-----|
| | | | Tests / | | | | | 0 | 1 | 2 | 3 4 | 5 | 6 7 | 8 | 9 (| 1 | 2 3 |
| 24 | Bring a science processor down to check failover processing | | EGS10, EGS11 | ANY | Т | I N | ΜE | I | N | | ТН | Ι | S | P | ΕF | RI | OD |
| 25 | Register a new algorithm | | EGS10, EGS11 | ANY | T | I N | ΜE | I | N | - | ТН | I | S | P | ΕF | RI | OD |
| 26 | Order tracking | | EGS10, EGS11 | ANY | Т | IN | ΜE | I | N | = | ТН | Ι | S | P | ΕF | RΙ | OD |
| 27 | Check DCE capabilities (add/remove users, cells, etc) | | EGS10, EGS11 | ANY | Т | I N | ΜЕ | I | N | - | ТН | Ι | S | P | ΕF | RI | OD |